



CyberScan 2100,1100 & 510 Series Bench Meters

• pH • Ion • ORP • Conductivity • TDS

SOLUTIONS FOR WATER ANALYSIS

EUTECH
INSTRUMENTS
Technology Made Easy ...



Corporate Profile

EUTECH
INSTRUMENTS

Technology Made Easy ...

| Over 15 Years of Product Excellence | Eutech Instruments is a leading ISO9001-certified company established in 1990. Dedicated to the design and manufacture of sensor-based instruments for water quality analysis, Eutech is a pioneer in the development of ASIC-based (Application Specific Integrated Circuit) instruments, and is internationally recognised for its achievements in sensor technology, software programming and product design. Eutech has an extensive product line, which includes the world's first Windows® CE-driven colour touchscreen research-grade bench meter, as well as instruments with proprietary patents and trademarks.

| Commitment to R&D | Eutech's competitiveness comes from our strong commitment to R&D. This is backed by a dedicated team of scientists and engineers who thrive on meeting new technological challenges to simplify laboratory and field analytical procedures. The Eutech team is constantly driven to explore the latest technologies and applying them in our design and manufacture of advanced instruments. The result is a unique line of products that are accurate, consistent, reliable and easy to use.

| Comprehensive Product Line | Eutech's constant drive for innovation is reason for our unique and expansive portfolio of microprocessor-based instruments and chemical sensor systems. We offer a comprehensive range of laboratory and field instruments for electrochemical and photometric water analysis. Eutech also manufactures continuous on-line process instruments for the monitoring and control of pH, Conductivity, Total Dissolved Solids (TDS), Redox Potential (ORP), Dissolved Oxygen (DO) and other water quality parameters.

Eutech products range from compact pocket testers and portable meters to research-grade benchtop meters and industrial process controllers. Each product carries the signature Eutech intuitive design and is packed with advanced user-friendly features.

| Customer Focus | Every Eutech innovation is conceptualised with the user in mind. This, coupled with our strategic location in the design and technology hub of Asia, has enabled the company to produce cutting edge instruments at competitive prices. Our consistent demonstration of insight into customer needs and product demands has earned the company consecutive Frost & Sullivan Market Engineering awards for Product Line Strategy.

Driven by a successful Total Customer Satisfaction Program incorporated in the ISO9001:2000 Quality System, all products undergo extensive testing and calibration by a qualified team of technical experts. Stringent quality control measures guarantee consistency, durability and performance. Eutech products are certified to comply with various global testing standards.

| Forging New Frontiers in Water Analysis | Underlying Eutech's objective to be a world leader in the field of water analysis instrumentation, the company adopts a proactive stand in anticipating the needs of the industry. With increasing global awareness and concern for water quality, the future provides new and exciting challenges and opportunities. To realize the potential of advanced water analytical technologies, Eutech will continue to forge close links and strategic alliances with research institutions, government agencies and private sector firms worldwide. These efforts support the Eutech mission – to make advanced technology easy to use.

| Global Reach | Eutech products are marketed in over seventy countries worldwide, through an extensive network of associate companies and distributors, with manufacturing facilities in Singapore and Malaysia. Eutech Instruments Singapore has a full-fledged value-chain operation which comprises R&D, manufacturing, marketing, customer service and logistics for worldwide support to customers.

| Thermo Fisher Scientific | Eutech is now part of Thermo Fisher Scientific, the world leader in serving science. Thermo Fisher Scientific enables customers to make the world healthier, cleaner and safer by providing analytical instruments, equipment, reagents and consumables, software and services for research, analysis, discovery and diagnostics. With annual sales of more than \$9 billion, Thermo Fisher Scientific has 30,000 employees and serves more than 350,000 customers in pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies as well as environmental, industrial quality and process control settings.

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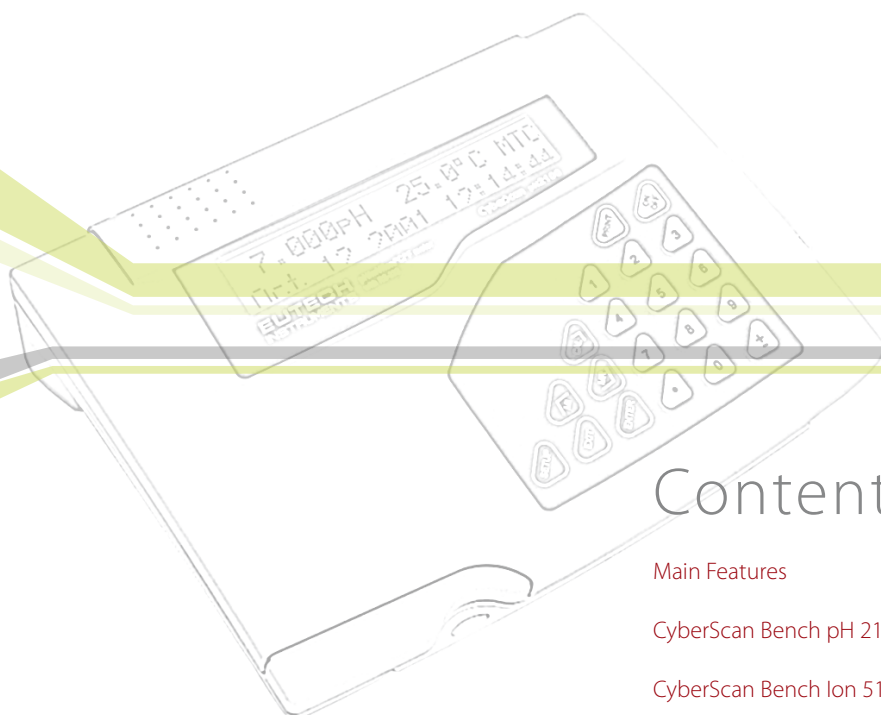
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Main Features

- Easy To Use
- Dual-Line Display
- Analog Recorder Output
- Non-Volatile Memory
- Detachable Electrode Holder
- 3-Year Warranty

User-Customisable Setup

Customise meter to your needs

Hold Function

Holds reading for later reference

Selectable ATC/MTC

Compensates for electrode response under varying temperature for higher accuracy

Stability Indicator

Prompts when reading has stabilised

Multi-Electrode Holder

More organised, less space occupied



Dual-Display LCD

With self-diagnostic messages



Slide-Out Instruction Card

For quick, convenient referencing



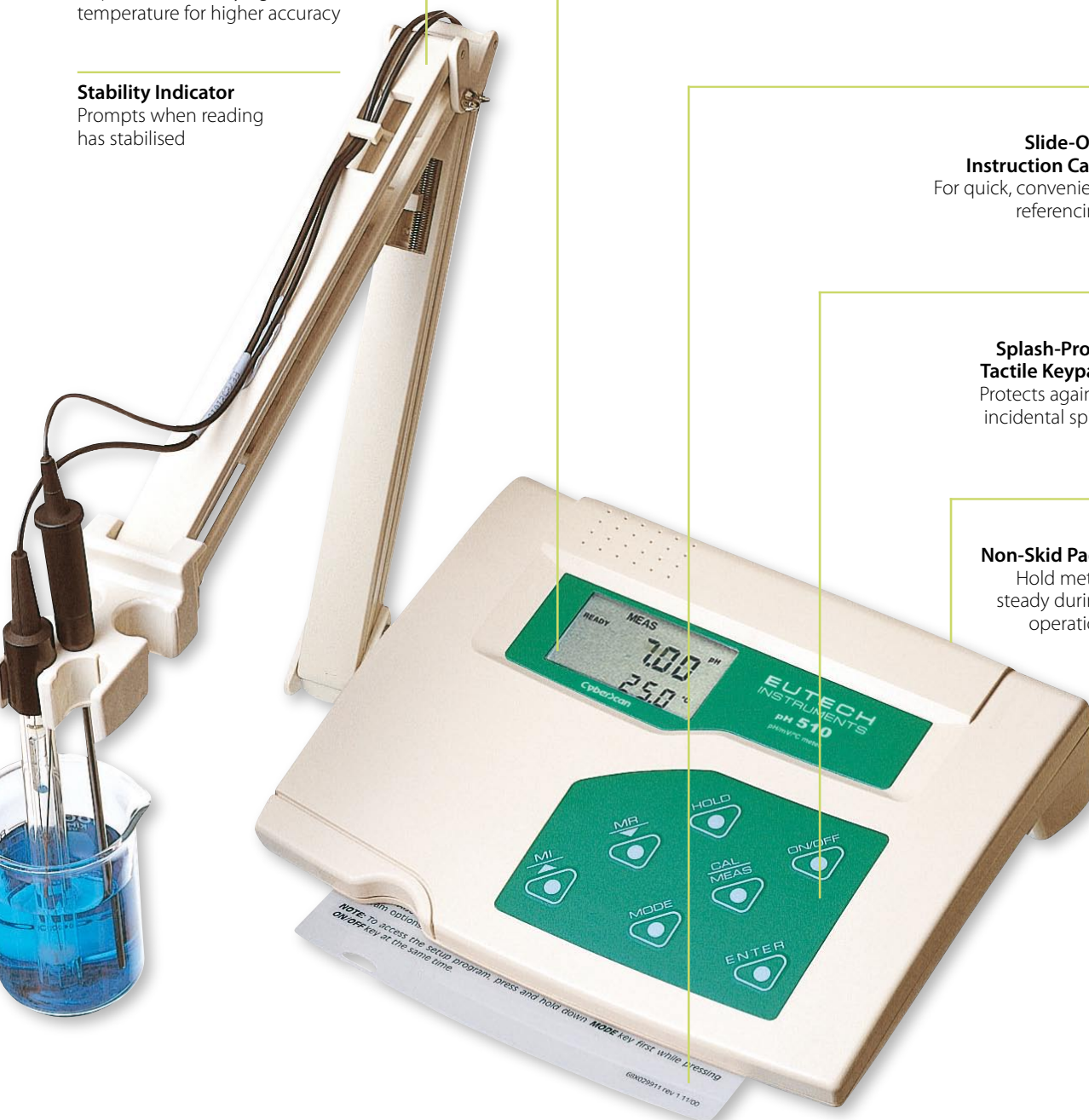
Splash-Proof Tactile Keypad

Protects against incidental spills



Non-Skid Pads

Hold meter steady during operation





CyberScan pH 2100

pH / Ion / ORP / Temperature

Measure pH, mV, ORP, ion and temperature with one benchtop meter! The CyberScan pH 2100 features a backlit two-line screen that displays readings, time, date as well as user-friendly prompts for easy set-up and trouble-shooting. An RS232 output allows easy transfer of information out of meter. Choose to send your data to a computer/printer at the press of a button, or program your meter to perform data synchronizing at fixed timed intervals.

- Measures up to 3-digit resolution
- Analog recorder output for convenient documentation of results with any chart-recording device
- Quick, easy calibration with no mistakes – up to 5-point push button calibration with auto-buffer recognition
- High/low set point alarms allows convenient monitoring within a designated range
- Selectable automatic/manual temperature compensation for optimum accuracy under varying temperatures
- Non-volatile memory stores up to 100 data sets
- Automatic datalogging with preset intervals

Applications: • Water quality testing • Sewage treatment • Fertilizer testing • Plant tissue testing • Food processing (for HACCP compliance) • Geological and ecological testing • Metal plating • Pharmaceutical industries
• Use with ORP to monitor plating operations, ozonation system efficiency and other redox measurements

Eutech CyberScan

Bench pH 2100 & pH 1100 Meters



CyberScan pH 1100

pH / ORP / Temperature

Advanced features, high performance and optimal versatility on a user-friendly interface platform – the pH 1100 measures with an accuracy of ± 0.002 pH at three-decimal resolution. Its inbuilt cal-due alarm runs on a real time clock to remind user of periodic calibrations. Meter comes with a backlit two-line dot matrix display which also shows last calibration status.

- Quick, easy calibration with no mistakes – up to 5-point push button calibration
- High/low set point alarms allows convenient monitoring within a designated range
- Non-volatile memory stores up to 100 data sets
- Calculates electrode slope and offset automatically
- Automatic datalogging with preset intervals

Applications: • Water quality testing • Sewage treatment • Fertilizer testing • Plant tissue testing • Food processing (for HACCP compliance) • Geological and ecological testing • Metal plating • Pharmaceutical industries



CyberScan Ion 510

Ion / pH / ORP / Temperature

Versatile and economical, Eutech's CyberScan Ion 510 comes with a dual-line custom display that allows direct readouts of pH, ORP, ion concentration and temperature. With a range that covers up to $\pm 1999\text{mV}$, the bench meter is flexible for use with a good variety of Ion Selective Electrodes in accordance with users' needs.

- Measures up to 2-digit resolution
- Electrode output mode allows users to verify electrode performance while taking ion measurements
- Quick, easy calibration with no mistakes – up to 5 pH point push button calibration with auto-buffer recognition
- Analog recorder output for convenient documentation of results with any chart-recording device
- Non-volatile memory stores up to 100 data sets
- Packaged with two power adapters – 110 VAC to 9 VDC and 220 VAC to 9 VDC

Applications: • General use in laboratories • Titration • Quality assurance • Ecological studies • Food-processing

Eutech CyberScan Bench Ion 510 & pH 510 Meters



CyberScan pH 510

pH / ORP / Temperature

A Eutech favourite! – the user-friendly pH 510 allows users to switch from pH to mV readings and comes with a pH and temperature probe for general-purpose measurements. Analog recorder output allows easy transfer of readings to external chart-recording devices and into hardcopies. The CyberScan pH 510 is value for money and ideal for routine use in schools, laboratories and production plants.

- Dual display shows pH (or mV) and temperature readings
- Quick, easy calibration with no mistakes – up to 5-point push button calibration with auto-buffer recognition
- Non-volatile memory stores up to 100 data sets
- Packaged with two power adapters – 110 VAC to 9 VDC and 220 VAC to 9 VDC

Applications: • General use in laboratories • Titration • Quality assurance • Ecological studies • Food-processing



CyberScan CON 510

Conductivity / Total Dissolved Solids / Temperature

The CyberScan CON 510 offers high precision and stability for years of reliable performance. With selectable cell constant and auto-ranging across 5 ranges, the CON 510 is an affordable bench meter that provides accurate, consistent measurement of conductivity.

- Adjustable TDS factor for more accurate results
- Quick, easy calibration with no mistakes – up to 5-point push button calibration
- Single point or multi point calibration options
- Auto-ranging for fast response with high resolution
- Electrode comes with in-built ATC function, and is designed for minimal air bubble entrapment during measurement
- Non-volatile memory stores up to 50 data sets

Applications: • Water quality testing • Checking metal finishes • Solutions • Cooling tower water • Printing fountain solutions • Boiler water • Brines • Drilling mud • Rinse tanks • Ponds • Pollution control • Recirculating systems • Waste water • Industrial process systems

Eutech CyberScan Bench CON 510 & PC 510 Meters



CyberScan PC 510

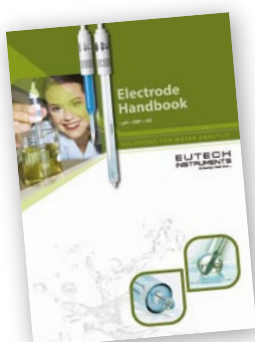
pH / ORP / Conductivity / Total Dissolved Solids / Temperature

A real value-for-money, the CyberScan PC 510 offers measurements in pH, conductivity, TDS, and temperature, all in one single meter. Incorporating signature user-friendly features typical to the CyberScan 510 series, this multi-parameter meter is a must-have in your laboratory!

- Analog recorder output for convenient documentation of results with any chart-recording device
- Quick, easy calibration with no mistakes – up to 5-point push button calibration with auto-buffer recognition
- Adjustable TDS factor for more accurate results
- Selectable automatic/manual temperature compensation for optimum accuracy under varying temperatures
- Electrode comes with in-built ATC function, and is designed for minimal air bubble entrapment during measurement

Applications: • Water quality testing • Checking metal finishes • Solutions • Cooling tower water • Printing fountain solutions • Boiler water • Brines • Drilling mud • Rinse tanks • Ponds • Pollution control • Recirculating systems • Waste water • Industrial process systems • General use in laboratories • Titration • Quality assurance • Ecological studies • Food-processing

Eutech CyberScan Bench Accessories



Electrode Handbook
(Order No.: 08X233502)

| Electrode Holder with Swivel Arm | Electrode holder with swivel arm allows convenient hands-free operation. A weighted 6-inch diameter base gives you more flexibility with 360° pivoting of holder, while swivel arm allows you to move electrode from side to side or up and down while keeping electrodes at a constant vertical angle.

Holds up to four standard size electrodes (14 mm diameter) and one ATC probe.

| Electrodes | Eutech offers an extensive selection of epoxy and glass-body electrodes for a wide range of parameters and applications. Combination designs are convenient and require no separate sensing and reference half-cell electrodes.

| Buffer & Calibration Solutions (480 ml) | Eutech buffers and calibration solutions are available in packs of 480 ml durable plastic bottles – economical and convenient for laboratory use. (MSDS and COA can be downloaded under “Support” at <http://www.eutechinst.com>)

| Calibration Sachets (20 x 20 ml Per Box) | Economical NIST traceable sachets offer quick, accurate and convenient calibration. Simply insert electrode into sachet pack, calibrate, rinse and discard sachet – no separate container needed!

| RS232 Printer | The convenience of printing directly from your meter whenever, wherever! This compact dot-matrix microprinter connects easily to your hand-held meters via an RS232C outlet – ideal for data-recording and report-generation. Connecting cable included.



Flexible Electrode Holder



pH Buffer Sachets



pH Buffer Solutions



Electrodes



Microprinter

CyberScan Bench

Ordering Information

Order Code	Part No.	Description
ECPH210042S	01X279003	CyberScan pH 2100 with ECFG7350401B, ECPH5TEMB01P, Integral Electrode Holder ECDA2000 and ECCA01M09F09
ECPH210041S	01X279009	CyberScan pH 2100 with ECPH5TEMB01P, Integral Electrode Holder ECDA2000 and ECCA01M09F09
ECPH110042S	01X279006	CyberScan pH 1100 with ECFG7350401B, ECPH5TEMB01P, Integral Electrode Holder ECDA2000 and ECCA01M09F09
ECPH110041S	01X279011	CyberScan pH 1100 with ECPH5TEMB01P, Integral Electrode Holder ECDA2000 and ECCA01M09F09
ECION51041S	01X263911	CyberScan Ion 510 with ECPH5TEMB01P and Integral Electrode Holder
ECPH51042S	01X263318	CyberScan pH 510 with ECFC7252101B, ECPH5TEMB01P and Integral Electrode Holder
ECPH51041S	01X263314	CyberScan pH 510 with ECPH5TEMB01P and Integral Electrode Holder
ECCON51043S	01X305204	CyberScan CON 510 with ECCONSEN91W and Integral Electrode Holder
ECPC51043S	01X270607	CyberScan PC 510 with ECFC7252201B, ECCONSEN91W and Integral Electrode Holder
ECFG7350401B	93X218814	Glass-Body Refillable pH Combination Electrode (1 m Cable)
ECFC7252101B	01X099412	Plastic-Body Gel-Sealed Single-Junction pH Combination Electrode (1 m Cable)
ECFC7252201B	01X099417	Plastic-Body Gel-Sealed Double-Junction pH Combination Electrode (1 m Cable)
ECFC7960201B	01X256613	Plastic-Body Gel-Sealed Double-Junction ORP Combination Electrode (1 m Cable)
ECFE7352901B	93X218990	Plastic-Body 3-in-1 Gel-Sealed pH Combination Electrode with Built-In ATC (1 m Cable)
ECPH5TEMB01P	01X210303	Stainless Steel Temperature Probe (1 m Cable)
ECCONSEN72W	93X244303	2 Platinum Rings Epoxy-Body Electrode with ATC, K=0.1 (1 m Cable)
ECCONSEN73W	93X244306	2 Platinum Rings Epoxy-Body Electrode with ATC, K=10.0 (1 m Cable)
ECCONSEN91W	01X244702	2 Stainless Steel Rings Ultem-Body Electrode with ATC, K=1.0 (1 m Cable)
ECCA01M09F09	30X219401	Custom RS232 Communication Cable (1 m Cable)
ECPHELSTDC	01X081600	Electrode Holder (Stand with Base Plate)
ECMICROPRNTR01	01X230001	Serial Impact Dot-Matrix, Paper-Roll Portable Printer with 120 VAC Power Adapter Provided
ECMICROPRNTR02	01X230002	Serial Impact Dot-Matrix, Paper-Roll Portable Printer with 220 VAC Power Adapter Provided
ECMICROPRNTR02CLK	01X230004	Serial Impact Dot-Matrix, Paper-Roll Portable Printer with Built-In Real Time Clock, 220 VAC Power Adapter Provided
60X030111	60X030111	AC/DC Power Adapter (120 VAC, 50/60 Hz), 2-Flat Pin, US Type
60X030112	60X030112	AC/DC Power Adapter (220 VAC, 50/60 Hz), 2-Round Pin, Euro Type



Design of Eutech's bench meters are patented under the United States Patent Law, patent number: 371 748. Patent rights in other areas are pending.





CyberScan Bench Specification Tables




| Warranty | Eutech Instruments provides three years warranty against manufacturing defects for its meters, and six months for its electrodes.









Eutech reserves the right to make changes, improvements and modifications to products shown.

pH/Ion Bench Meters		pH 2100		pH 1100		Ion 510		pH 510	
									
pH	Range	- 1.000 to 14.000 pH				0.00 to 14.00 pH			
	Resolution	0.01, 0.001 pH (User selectable)				0.01 pH			
	Accuracy	± 0.01, ±0.002 pH				±0.01 pH + 1 LSD			
	Buffer Option	USA: pH 1.68, 4.01, 7.00, 10.01, 12.45 NIST: pH 1.68, 4.01, 6.86, 9.18, 12.45 User 1: pH 1.68, 4.01, 7.00, 9.18, 12.45 User 2: pH 1.68, 4.01, 6.86, 10.01, 12.45 Custom: Min. of 2 and max. of 5 points				USA: pH 1.68, 4.01, 7.00, 10.01, 12.45 NIST: pH 1.68, 4.01, 6.86, 9.18, 12.45			
	Calibration	1 to 5 Points							
mV	Range	-1850.0 to +1850.0 mV				-2000 to +2000 mV			
	Resolution	0.1 mV				0.1 mV (±199.9 mV) 1 mV (Beyond ±200 mV)			
	Accuracy	± 0.2 mV				±0.2 mV (±199.9 mV) ±2 mV (Beyond ±200 mV)			
Ion	Range	0.001 to 19999		—		0.01 to 1999 ppm		—	
	Resolution	0.001 ppm (0.000 to 0.999 ppm) 0.01 ppm (1.00 to 9.99 ppm) 0.1 ppm (10.0 to 99.9 ppm) 1 ppm (100 to 19999 ppm)		—		0.01 ppm (0.01 to 0.99 ppm) 0.1 ppm (1.0 to 199.9 ppm) 1 ppm (200 to 1999 ppm)		—	
	Accuracy	±0.5 % Full scale (monovalent) 1 % Full scale (divalent)		—		±0.5 % Full scale (monovalent) 1 % Full scale (divalent)		—	
	Calibration	5 Points		—		3 Points		—	
Temperature	Range	-5.0 to 105.0 °C / 23.0 to 221.0 °F				0.0 to 100.0 °C			
	Resolution	0.1 °C / 0.1 °F				0.1 °C			
	Accuracy	±0.3 °C / 0.5 °F				±0.3 °C			
	ATC	Yes (0 to 100 °C)							

Conductivity Bench Meter		CON 510
		
Conductivity	Range	.. to 19.99, 199.9, 1999 µS/cm ; 19.99, 199.9 mS/cm
	Resolution	0.01, 0.1, 1 µS/cm ; 0.01, 0.1 mS/cm
	Accuracy	±1 % Full scale + 1 digit
	Calibration	Up to 4 points (auto calibration), up to 5 points (manual)
TDS	Range	.. to 9.99, 99.9, 999 ppm ; 9.99, 99.9 ppt (Max. of 199.9 based on factor setting)
	Resolution	0.01, 0.1, 1 ppm ; 0.01, 0.1 ppt
	Accuracy	± 1 % Full scale + 1 digit
	Calibration	5 Points (1 per range)
Temperature	Range	- 10.0 to 110.0 °C / 14.0 to 230.0 °F (Meter)
	Resolution	0.1 °C / 0.1 °F
	Accuracy	± 0.5 °C (± 0.9 °F)
	ATC	Yes (0 to 80 °C)

Multi-Parameter Bench Meter		PC 510
		
pH	Range	-2.00 to +16.00 pH
	Resolution	0.01 pH
	Accuracy	±0.01 pH
	Buffer Option	USA: pH 1.68, 4.01, 7.00, 10.01, 12.45 ; NIST: pH 1.68, 4.01, 6.86, 9.18, 12.45
	Calibration	Up to 5 points
mV	Range	-600 to 600 mV
	Resolution	0.1 mV (±199.9 mV) ; 1 mV (beyond ±200 mV)
	Accuracy	±0.2 mV (±199.9 mV) ; ±2 mV (beyond ±200 mV)
Conductivity	Range	.. to 19.99, 199.9, 1999 µS/cm ; 19.99, 199.9 mS/cm
	Resolution	0.01, 0.1, 1 µS/cm ; 0.01, 0.1 mS/cm
	Accuracy	±1 % Full scale + 1 digit
	Calibration	Up to 4 points (auto calibration), up to 5 points (manual)
TDS	Range	.. to 9.99, 99.9, 999 ppm ; 9.99, 99.9 ppt (Max. of 199.9 based on factor setting)
	Resolution	0.01, 0.1, 1 ppm ; 0.01, 0.1 ppt
	Accuracy	± 1 % Full scale + 1 digit
	Calibration	5 Points (1 per range)
Temperature	Range	- 10.0 to 110.0 °C / 14.0 to 230.0 °F (Meter)
	Resolution	0.1 °C / 0.1 °F
	Accuracy	± 0.5 °C (± 0.9 °F)
	ATC	Yes (0 to 100 °C)

CyberScan Bench Comparison Tables

Meter Features	pH 2100	pH 1100	Ion 510	pH 510	CON 510	PC 510
						
pH Slope & Offset Display	Yes				–	
Normalization Temperature	–				15.0 to 30.0 °C (Adjustable)	
Temperature Coefficient	–				0.0 to 10.0 % per °C	
Cell Constant	–				0.1, 1.0, 10.00	1.0
Auto-Ranging	–				Yes	
Stability Indicator					Yes	
Hold Function					Yes	
Date & Time	Yes		–			
Display	Dot matrix dual-display		Custom dual-display LCD			
Built-In Electrode Arm	Yes					
Memory	100 Data sets				50 Data sets	–
Output	RS232 (via cable), recorder (±1800 mV)		Recorder (±2000 mV)		–	
Input	BNC, phono (ATC)				6 Pin connector (for COND/TDS & Temp)	BNC, 6 Pin round connector
Power Requirements	9 V DC adapter for 120 VAC or 220 VAC, 500 mA					
Dimension ; Weight	Meter: 23 (L) x 18 (B) x 6.3 (H) cm ; 850 g Boxed: 40 (L) x 26 (B) x 9 (H) cm ; 1400 g		Meter: 23 (L) x 18 (B) x 6 (H) cm ; 750 g Boxed: 40 (L) x 26 (B) x 9 (H) cm ; 1400 g		Meter: 23 (L) x 18 (B) x 6.3 (H) cm ; 750 g Boxed: 40 (L) x 26 (B) x 9 (H) cm ; 1400 g	



<< Sewage Treatment
>> Geological & Ecological Testing



<< Pharmaceutical Industries
>> Cooling Tower



Eutech Instruments manufactures a comprehensive range of laboratory and field instrumentation for water analysis. Eutech Instruments also produces on-line process instruments for water quality monitoring and control. Innovative products from Eutech include:

Dual Display Testers | EcoScan Palmtops | Waterproof Portable Colorimeters and Turbidimeters | CyberScan Portable Series | CyberScan Bench Series | CyberScan Touchscreen

| World-Wide Sales and Service Support | Eutech provides world-wide sales and service support for all its products through its network of international distributors. Contact us at marketing@eutechinst.com for details of your nearest distributor.



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